

SEQUENCE LISTING

<110> Eiken Kagaku Kabushiki Kaisha

<120> Method of Synthesizing Nucleic Acid.

<130> E2-001PCT

<140>

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<150> JP-1998-317476

<151> 1998-11-09

<160> 29

<170> PatentIn Ver. 2.0

<210> 1

<211> 52

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequense

BEST AVAILABLE COPY

<400> 1

cgactctaga ggatccccgg gtactttttg ttgtgtggaa ttgtgagcgg at

52

<210> 2

<211> 51

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

synthesized primer sequense

<400> 2

acaacgtcgt gactgggaaa acccttttg tgcgggcctc ttgcgttatta c

51

<210> 3

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

synthesized primer sequense

<400> 3

BEST AVAILABLE COPY

actttatgct tccggctcgta

21

<210> 4

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 4

gttggaaagg gcgatcg

17

<210> 5

<211> 600

<212> DNA

<213> Bacteriophage M13mp18

<400> 5

gcgcctaata cgcaaaccgc ctctccccgc gcgttggccg attcatataa 60

cgacagggtt cccgactgga aagcgggcag tgagcgcaac gcaattaaatg tgagtttagct 120

cactcattag gcacccagg cttacactt tatgtttccg gctcgatgt tggat 180

tgtgagcgga taacaatttc acacaggaaa cagctatgac catgattacg aattcgagct 240

cggtacccgg ggatccctta gagtcgaccc gcaaggcatgc aagcttggca ctggccgtcg 300

tttacaacg tcgtgactgg gaaaacccttg gcgttaccca acttaatgc ctgcagcac 360

atcccccttt cgccagctgg cgtaatagcg aagaggccccg caccgatcgcc 420
agttgcgcag cctgaatggc gaatggcgct ttgcctggtt tccggcacca gaagcggtgc 480
cgaaaaagctg gctggagtgatc gatcttcctg aggccgatac ggtcgicgtc ccctcaaact 540
ggcagatgca cggttacgat gcgcctatct acaccaacgt aacctatccc attacggtca 600

<210> 6

<211> 63

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 6

ctcttccaaa agtaaggcag gaaatgtgaa accagatcgt aatttggaag acccagcattc 60
63
cag

<210> 7

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 7

gtggatttcgc actccctcccg ctgatcgaaa cctgcctcggt cgt

43

<210> 8

<211> 16

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 8

gccacccgtggg tgggaa

16

<210> 9

<211> 22

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 9

ggcgagggag ttcttcttct ag

22

<210> 10

<211> 430

<212> DNA

<213> Hepatitis B virus

<400> 10

tccttgaca ccgcctctgc tctgtatcg gaggccttag agtctccgga acattgttca 60
 cctcaccata cagcacttag gcaagctatt ctgtgttggg gtgagttaat gaatctggcc 120
 acctgggtgg gaagtaattt ggaagaccca gcatccaggg aatttagttagt cagctatgtc 180
 aatgttaata tgggcctaaa aatcagacaa ctattgtgtt ttcacatttc ctgccttact 240
 ttggaaagag aaacigtttt ggagtatttg gtatctttt gagtgtggat tcgcactcct 300
 cccgcttaca gaccacccaa tgcccctatc ttatcaacac ttccggaaac tactgttgtt 360
 agacgacgag gcaggcccc tagaagaaga actccctcgc ctgcagacg aaggctcaa 420
 tcgcccgcgtc

430

<210> 11

<211> 293

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
 synthesized sequence

<400> 11

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 gacgttgtaa aacgacggcc agtgccaaagc ttgcattgcgc gcagggtcgac tcttagaggat 180
 ccccggtac cgagctcgaa ttgtatca tggtcatacg tttttccctgt gtgaaattgt 240
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<210> 12

<211> 293

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
 synthesized sequence

<400> 12

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 cacacaggaa acagctatga ccatgattac gaattcgagc tcggtaacccg gggatccctt 120
 agagtcgacc tgcaggcatg caagcttggc actggccgtc gtttacaac gtcgtgactg 180
 ggaaaaaccctt ggcgttaccc aacttaatcg ccttgcagca catccccctt tcgccagctg 240
 gcgttaatgc gaagaggccc gcacaaaaag gttttccca gtcacgacgt tgt 293

<210> 13

<211> 459

<212> DNA

〈213〉 Artificial Sequence

• <220>

223 Description of Artificial Sequence:Artificially synthesized sequence

<400> 13

acaacgcgt gactgggaaa acccttttg tgcggcctc ttcgttatta cgccagctgg 60
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gacgttgtaa aacgacggcc agtgccaagc ttgcattgcct gcaggtcgac tctagaggat 180
ccccgggtac cgagctcgaa ttgtatca tggtcatagc tggccgtgt gtgaaatgt 240
tatccgcctca caattccaca caacaaaaag taccgggaa tcccttagag tcgacctgca 300
ggcatgcaag ctggcactg gccgtcgttt tacaacgtcg tgactggaa aaccctggcg 360
ttacccaact taatgcctt gcagcacatc cccctttcgc cagctggcgt aatagcgaag 420
aggcccccac aaaaagggtt ttcccgatca cgacgttgt 459

459

〈210〉 14

〈211〉 458

〈212〉 DNA

213 Artificial Sequence

〈220〉

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 14

cgactctaga ggatccccgg gtacttttg ttgtgtggaa ttgtgagcgg ataacaattt 60
 cacacaggaa acagctatga ccatgattac gaattcgagc tcggtacccg gggatcctct 120
 agagtcgacc tgcaggcatg caagcttggc actggccgtc gtttacaac gtcgtgactg 180
 gaaaaaccct ggcgttaccc aacttaatcg cttgcagca catccccctt tcgccagctg 240
 gcgtaatagc gaagaggccc gcacaaaaag gttttccca gtcacgacgt tgtaaaacga 300
 cggccagtgc caagcttgc a tgcctgcagg tcgactctag aggatccccg ggtaccgagc 360
 tcgaattcgt aatcatggtc atagctgtt cctgtgtgaa attgttatcc gctcacaattt 420
 ccacacaaca aaaagtaccc gggatcctc tagagtgc 458

<210> 15

<211> 790

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 15

acaacgtcgt gactggaaa acccttttg tgcggccctc ttgcgtatata cgccagctgg 60
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 gacgttgtaa aacgacggcc agtgccaaagc ttgcattgcct gcaggtcgac tctagaggat 180
 ccccggtac cgagctcgaa ttgcataatca tggcatagc ttttcctgt gtgaaattgt 240
 tatccgctca caattccaca caacaaaaag taccgggaa tcccttagag tcgaccctgca 300
 ggcattgcag cttggcactg gccgtcggtt tacaacgtcg tgactggaa aaccctggcg 360
 ttacccaact taatgcctt gcagcacatc ccccttcgc cagctggcgt aatagcgaag 420

agggccgcac aaaaagggtt ttcccaagtca cgacgttgta aaacgacggc cagtgc当地 480
 ctgcattgcc tcgcagggtcga ctcttagagga tccccgggtt ctttttgtt tggtggaaattt 540
 tgagcggata acaatttac acaggaaaca gctatgacca tgattacgaa ttgc当地 600
 gtacccgggg atcccttaga gtcgaccgtc aggcatgcaa gcttggcact ggccgtc当地 660
 ttacaacgtc gtgactggga aaacctggc gtttccaaac ttatgc当地 tgc当地 720
 cccccc当地 ccagctggcg taatagcgaa gaggccgc当地 caaaaagggtt ttcccaagtc 780
 acgacgttgt 790

<210> 16

<211> 789

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized sequence

<400> 16

cgactctaga ggatccccgg gtactttttt ttgtgtggaa ttgtgagccgg ataacaattt 60
 cacacaggaa acagctatga ccatgattac gaattcgagc tcggtaaccgg gggatccctt 120
 agagtcgacc tgcaggcatg caagcttggc acggccgtc gtttacaac gtcgtgactt 180
 gggaaaaccct ggcgttaccc aacttaatcg ctttgc当地 ctttccctt tcgccagctg 240
 gcgttaatgc gaagaggccc gcacaaaaag gttttccca gtcacgacgt tgtaaaacga 300
 cggccagtgca caagcttgca tgcctgcagg tcgactctag aggatccccgg ggtaccgagc 360
 tcgaattcgtt aatcatggtc atagctgttt cctgtgtgaa attgttatcc gtc当地 420
 ccacacaaca aaaagtaccc ggggatccctc tagagtc当地 ctgcaggcat gcaagcttgg 480

cactggccgt cgtttacaa cgtcgact gggaaaaccc ttttgtcg gcctcttcg 540
 ctattacgcc agctggcgaa agggggatgt gctgcaaggc gattaagtig ggtaacgcca 600
 gggtttccc agtcacgacg ttgtaaaaacg acggccagtg ccaagcttgc atgcctgcag 660
 gtcgactcta gaggatcccc ggttaccgag ctcgaattcg taatcatggt catagctgtt 720
 tcctgtgtga aattgttatac cgctcacaat tccacacaaac aaaaagtacc cggggatct 780
 cttagagtcg 789

<210> 17

<211> 310

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
 synthesized sequence

<400> 17

gtggattcgc actccctcccg ctgatcggtt cctgcctcg tgcataacaa cagtagttc 60
 cggaagtgtt gataagatag gggcatttgg tggtctgtaa gcgggaggag tgcgaatcca 120
 cactccaaaa gataacaaat actccaaaac agtttcctt ccaaaagtaa ggcaggaaat 180
 gtgaaaccac aatagtttc tgatTTTtag gcccatatta acattgacat agctgactac 240
 taattccctg gatgctgggt ctccaaatt acgatctggt ttcacatttc ctgccttact 300
 ttggaaagag 310

<210> 18

<211> 465

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially synthesized sequence

<400> 18

gtggattcgc actccctcccg ctgatcggga cctgcctcgt cgtctaaca cagtagttc 60
 cggaagtgtt gataagatag gggcatttgg tggctgtaa gcgggaggag tgcgaatcca 120
 cactccaaa gataccaaat actccaaaac agtttctttt cccaaagtaa ggcaggaaat 180
 gtgaaaccac aatagttgtc tgattttag gcccataatta acattgacat agctgactac 240
 taattccctg gatgctgggt cttccaaatt acgatctggt ttccatttt ctgccttact 300
 ttggaaagag aaactgtttt ggagtatttgg tttatcttttggat tcgcactcct 360
 cccgcttaca gaccacaaa tgcccatac ttatcaacac ttccggaaac tactgtttt 420
 agacgacgag gcagggtcccg atcagcggga ggagtgcgaa tccac 465

<210> 19

<211> 20

<212> DNA

<213> M13mp18

<400> 19

ccggggatcc tctagagtcg

20

<210> 20

<211> 20

<212> DNA

<213> M13mp18 mutant

<400> 20

ccggggatcc tctagagtca

20

<210> 21

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 21

cgactctaga ggatccccgg ttttttgtt gtggaaattgtt gagcggat

48

<210> 22

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

synthesized primer sequence

<400> 22

tgactctaga ggatccccgg ttttttgtgt gtggaaattgt gagcggat

48

<210> 23

<211> 47

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

synthesized primer sequence

<400> 23

cgtcggtgact gggaaaaccc tttttgtgcg ggcctcttcg ctattac

47

<210> 24

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially

synthesized primer sequence

<400> 24

actttatgct tccggctcgta

21

<210> 25

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 25

gttgggaagg gcgatcg

17

<210> 26

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 26

tgttcgtat gcagtggca gctttatgct gcggcggtgt tctg

44

<210> 27

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 27

tgctgggtcg gcacagcctg aagctgacct gaaataccctg gcctg

45

<210> 28

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 28

tgcttggc ctctcgta

18

<210> 29

<211> 17

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Artificially
synthesized primer sequence

<400> 29

gggtgtggga agctgtg

17